

# SWEL'09 @ AIED'09: Ontologies and Social Semantic Web for Intelligent Educational Systems

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## Workshop Description

An important target for educational Web application researchers and developers today is to provide means to unite, as much as possible, the efforts in creating information and knowledge components that are easily accessible, shareable, reusable and modifiable by others. Within the educational field, this motivates efforts to achieve semantically rich, well-structured, standardised and verified learning content. Ontologies and Semantic Web standards allow achieving such reusability, shareability and interoperability among educational Web resources. Conceptualizations, ontologies and the available Web standards such as XML, XTM, RDF(S), OWL, OWL-S, RuleML, LOM, SCORM and IMS-LD allow specification of components in a standard way.

The notion of Social Semantic Web describes an emerging design approach for building Semantic Web applications which employs Social Software approaches. Social Semantic Web systems are usually characterized through their emphasis on collaborative creation, usage and continuous refinement of Semantic Web structures by groups of humans. Social Semantic Web systems typically elicit domain knowledge through semi-formal ontologies, taxonomies or folksonomies.

Ontologies, Semantic Web and Social Semantic Web techniques offer new perspectives on intelligent educational systems by supporting more adequate and accurate representations of learners, their learning goals, learning material and contexts of its use, as well as more efficient access and navigation through learning resources. The SWEL'09@AIED'09 workshop focuses on the best practices of using these technologies for knowledge representation, adaptation and personalization in educational settings. We will discuss lessons learned, benefits and further steps to be undertaken.

SWEL'09@AIED'09 is seventh in the series, following the workshop on Concepts and Ontologies in Web-based Educational Systems at ICCE'2002, the three sessions of SWEL'04 (in conjunction with ITS'04, AH'04, and ISWC'04), the three sessions in 2005 (in conjunction with AIED'05, ICALT'05, and K-CAP'05), the session in 2006 at AH'06, the session in 2007 in conjunction with AIED'07 and the session at ITS 2008. SWEL has an established audience and a Web portal hosting related resources – the Ontologies for Education (O4E) Portal (<http://o4e.iiscs.wssu.edu/xwiki/bin/view/Blog/>).

General workshop web site: <http://compsci.wssu.edu/iis/swel/>